CLAIMS:

We claim:

1. A method of color correction, comprising the steps of:
sensing an illuminant; and
performing color correction for a color output device based on the illuminant.

2. The method of claim 1, further comprising the step of:
driving the color output device with the color correction based on the illuminant.

3. The method of claim 1, further comprising the step of:
adding an illuminant mode based on the illuminant to a color profile for the color output device.

4. The method of claim 1, the sensing step comprising the step of:
sensing the illuminant in a lighting environment where the color output device is located.

5. The method of claim 1, the sensing step comprising the step of:
sensing the illuminant in a lighting environment where an image to be output by the color output device is captured by a color digital camera.

6. The method of claim 1, wherein the color output device comprises a color printer.

7. The method of claim 1, wherein the color output device comprises a color monitor.

8. The method of claim 1, wherein the color output device comprises a color digital camera.

9. A color correction system, comprising:
an illuminant sensor to sense an illuminant; and

color correction software, comprising:

code to perform color correction for a color output device based on the illuminant.

10. The color correction system of claim 9, the color correction software further comprising:

code to read the illuminant sensed by the illuminant sensor.

11. The color correction system of claim 9, the color correction software further comprising:

code to drive the color output device with the color correction based on the illuminant.

12. The color correction system of claim 9, wherein the illuminant sensor is part of the color output device.

13. The color correction system of claim 9, the color correction software further comprising:

code to add an illuminant mode based on the illuminant to a color profile for the color output device.

14. The color correction system of claim 9, wherein the illuminant sensor senses the illuminant in a lighting environment where the color output device is located.

15. The color correction system of claim 9, wherein the illuminant sensor senses the illuminant in a lighting environment where an image to be output by the color output device is captured by a digital camera.

16. The color correction system of claim 9, wherein the color output device comprises a color printer.

17. The color correction system of claim 9, wherein the color output device comprises a color monitor.

18. The color correction system of claim 9, wherein the color output device comprises a color digital camera.

19. A color correction system, comprising:

a means for sensing an illuminant; and

a means for performing color correction for a computer system based on the illuminant.

20. The color correction system of claim 19, further comprising:

a means for printing an image on a color printer of the computer system with the color correction based on the illuminant.

21. The color correction system of claim 19, further comprising:

a means for displaying an image on a color monitor of the computer system with the color correction based on the illuminant.

22. A computer system, comprising:

a processor;

a color output device;

an illuminant sensor to sense an illuminant; and

color correction software executable by the processor to perform color correction for the color output device based on the illuminant.

23. The computer system of claim 22, wherein the color output device comprises a color printer.

24. The computer system of claim 22, wherein the color output device comprises a color monitor.

25. The computer system of claim 22, wherein the color output device comprises a color digital camera.

26. A color correction system, comprising:

a means for receiving illuminant information representing an illuminant sensed by an illuminant sensor; and

a means for performing color correction for a color output device based on the illuminant.

27. The color correction system of claim 26, wherein the color output device comprises a color printer.

28. The color correction system of claim 26, wherein the color output device comprises a color monitor.

29. The color correction system of claim 26, wherein the color output device comprises a color digital camera.

30. A method of color correction, comprising the steps of:

reading illuminant information and spectral reflectance data associated with a color image; and

performing color correction for the color image based on the illuminant information and the spectral reflectance data.

31. The method of claim 30, wherein the illuminant information and the spectral reflectance data are embedded in the color image.

32. The method of claim 30, further comprising the step of:

receiving the illuminant information, the spectral reflectance data and the color image from a web browser.

33. A method of illuminant-based color management, comprising the steps of:

sensing an illuminant condition in which a color image is captured by a color digital camera;

detecting spectral reflectance data for an object corresponding to the color image; and

associating the illuminant condition and the spectral reflectance data with the color image.

34. The method of claim 33, the associating step comprising the step of:

embedding the illuminant information and the spectral reflectance data in the color image.